

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.15**SOURCE INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** SIR-001214**Date Inspected:** 25-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**Location:** Changxing Dao, Shanghai**Quality Control Contact:** William (Bill) Oak**Quality Control Present:** Yes No**Material transfer:** Yes No N/A**Sampled Items:** Yes No N/A**Stock Transfer:** Yes No N/A**OK to Cut:** Yes No N/A**Rebar Test Witness:** Yes No N/A**Delayed/Cancelled:** Yes No N/A**Other:** Coatings Inspection**Bridge No:** 34-0006**Component:** BG 7AE, OBG 6AW, Office, OBG 6BW, Lift**Bid Item:** 77, 78, 79**Lot No:** B265**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

**OBG 7AE**

Internal base metal surfaces were abrasive blasted and subsequently rejected for non-compliance with SSPC SP-10 condition rejection was due to visible rust evident on base metal surfaces in localized areas as well as previously marked areas not amended. A total of 5 inspections were performed prior to the application of undercoat Interzinc 22, after the 5th inspection SSPC SP-10 was achieved and surfaces coated with undercoat.

**ABF Office**

Reviewed and attended to backlog of project documentation.

**OBG 6BW**

ZPMC QC representatives performed Dry Film Thickness (DFT) checking on internal surfaces coated with Interzinc 22. Caltrans QA Lumley observed personnel performing random checks and then viewed failed area of external undercoated surface of previous adhesion testing with ABF QA Bill Oak.

**Lift 2 West**

Repairs were in process Caltrans QA Lumley observed ZPMC "sanding" dry-spray from undercoated surfaces of stiffeners below the Top Plate over the Cross Beam termination and FL-3 Beams. ZPMC has typically performed this operation and removed excessive undercoat and created additional repairs from DFT reduction from the "sanding" process.

**OBG 6AW**

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## SOURCE INSPECTION REPORT

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ZPMC performed de-greasing and water washing in accordance with SSPC SP-1. Caltrans QA Lumley inquired with ZPMC QC Dong Yao Fei as to allowing Caltrans personnel to complete the NDT testing on the segment prior to washing operations Dong Yao Fei stated that his department not responsible for this. Caltrans NDT Technician was performing MT operations concurrent with SP-1 work until the washing operations interfered with the NDT work.

### Lift 2 West

ZPMC requested a "Final" inspection on the Cross Beam terminus internal surfaces including the FL-3 Beams. The catwalk railing required repairs as it was previously cut, all other areas were in general compliance, access to the upper portions was not provided and no inspection was performed.

Note: Caltrans QA Lumley observed ZPMC personnel performing welding operations within Abrasive Blasting Workshop #2. Caltrans QA Lumley inquired with ZPMC QC Dong Fei Yao as to this activity and was informed that repairs were being performed.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### Summary of Conversations:

Caltrans QA Lumley inquired with ABF QA Bill Oak as to adhesion testing on OBG 6BW and also "Final" inspection for repaired items in Paint Shop #2 scheduling. Mr. Oak stated he would confirm and inform when he discovered himself.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, (858) 699-7549, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Lumley,James	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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